

AMENDMENTS TO THE CLAIMS:

This listing of claims will replace all prior versions and listings of claims in the application:

18. (Currently Amended) A method of measuring the macroaggregation aggregation of blood platelets, comprising:
- a) obtaining a sample containing blood platelets;
 - b) adding at least one activator reaction mixture ingredients that induces platelet aggregation to the sample, thereby creating a reaction mixture;
 - c) mixing the reaction mixture in a first reaction phase for a time sufficient to induce formation of macroaggregates; and
 - d) mixing the reaction mixture less vigorously or not at all in a second reaction phase; and
 - e) measuring the macroaggregation aggregation of the blood platelets in the second reaction phase.
19. (Previously Presented) The method of claim 18, wherein the mixing is accomplished by stirring, shaking, vibrating, or ultrasound.
20. (Currently Amended) The method of claim 19, wherein the mixing is performed at a the stirring rate is between 200 and 2000 rpm.
21. (Previously Presented) The method of claim 18, wherein the blood platelets are physiologically active blood platelets.
22. (Canceled)
23. (Canceled)

24. (Previously Presented) The method of claim 18, wherein the sample is chosen from at least one of whole blood, platelet-rich plasma, diluted platelet-rich plasma, and purified platelets.

25. (Currently amended) The method of claim 18, wherein measuring the macroaggregation ~~aggregation~~ of blood platelets is performed by one of turbidimetric, nephelometric or electromagnetic methods.

26. (Currently amended) The method of claim 18, wherein a mixing time is determined by the particular activator or activators ~~reaction mixture ingredients~~ used.

27. (Currently amended) The method of claim 26, wherein the ~~reaction mixture ingredients are platelet~~ activators ~~comprising~~ comprise ristocetin, collagen, ADP, epinephrine, or arachidonic acid.

28. (Currently Amended) A method of measuring the stability of blood platelet macroaggregates ~~aggregates~~, comprising:

- a) obtaining a sample containing blood platelets;
- b) adding at least one activator ~~reaction mixture ingredients~~ that induces platelet aggregation to the sample, thereby creating a first reaction mixture A;
- c) mixing the first reaction mixture A in a first reaction phase for a time sufficient to induce formation of macroaggregates;
- d) then mixing ~~the first~~ reaction mixture A less vigorously or not at all in a second reaction phase and measuring the macroaggregation ~~aggregation~~ of blood platelets in the second reaction phase in a first aggregation measurement;
- e) repeating steps a) and b) to generate an analogous second reaction mixture B;

- f) mixing the second reaction mixture B in a first reaction phase for a time sufficient to induce formation of macroaggregates, and measuring the macroaggregation of blood platelets in the first reaction phase wherein the a second aggregation measurement is performed while mixing; and
- g) comparing the first aggregation measurement of A to the second aggregation measurement of B.

29. (Previously Presented) The method of claim 28, wherein the mixing is accomplished by stirring, shaking, vibrating, or ultrasound.

30. (Currently Amended) The method of claim 29, wherein the mixing is performed at a the stirring rate is between 200 and 2000 rpm.

31. (Previously Presented) The method of claim 28, wherein the blood platelets are physiologically active blood platelets.

32. (Canceled)

33. (Canceled)

34. (Previously Presented) The method of claim 28, wherein the sample is chosen from at least one of whole blood, platelet-rich plasma, diluted platelet-rich plasma, and purified platelets.

35. (Currently Amended) The method of claim 28, wherein measuring the macroaggregation ~~aggregation~~ of blood platelets is performed by one of turbidimetric, nephelometric or electromagnetic methods.

36. (Currently Amended) The method of claim 28, wherein a mixing time is determined by the particular activator or activators ~~reaction mixture ingredients~~ used.

37. (Currently Amended) The method of claim 36, wherein the ~~reaction mixture ingredients are platelet activators~~ comprise ~~comprising~~ ristocetin, collagen, ADP, epinephrine, or arachidonic acid.

38. (Previously Presented) The method of claims 18 or 28, wherein the mixing of any reaction mixture is preceded by an incubation step without mixing.

39. (Previously Presented) The method of claim 38, wherein there is a sequence of multiple alternating mixing steps and non-mixing incubation steps.

40. (Previously Presented) The method of claims 18 or 28, wherein an initial aggregation measurement is taken before the reaction mixture is mixed.

41. (Canceled)

42. (Currently Amended) The method of claims 18 or 28, wherein the macroaggregation ~~aggregation~~ of blood platelets with other particles containing ligands or receptors that facilitate aggregation is measured.

43. (Canceled)

44. (Currently Amended) The method of claims 18 or 28, wherein the mixing in the second reaction phase is adjusted to a lower intensity than the first reaction phase rather than completely stopped.

45. (New) A method of measuring the macroaggregation of blood platelets, comprising:

- a) obtaining a reagent containing blood platelets;
- b) adding a sample that induces platelet aggregation to the reagent, thereby creating a reaction mixture;
- c) mixing the reaction mixture in a first reaction phase for a time sufficient to

induce formation of macroaggregates;

- d) mixing the reaction mixture less vigorously or not at all in a second reaction phase; and
- e) measuring the macroaggregation of the blood platelets in the second reaction phase.

46. (New) The method of claim 45, wherein the mixing is accomplished by stirring, shaking, vibrating, or ultrasound.

47. (New) The method of claim 46, wherein the mixing is performed at a rate between 200 and 2000 rpm.

48. (New) The method of claim 45, wherein the blood platelets are fixed blood platelets.

49. (New) The method of claim 48, wherein platelet macroaggregation is measured using a ristocetin cofactor test.

50. (New) The method of claim 45, wherein measuring the macroaggregation of blood platelets is performed by one of turbidimetric, nephelometric or electromagnetic methods.

51. (New) A method of measuring the stability of blood platelet macroaggregates, comprising:

- a) obtaining a reagent containing blood platelets;
- b) adding a sample that induces platelet aggregation to the reagent, thereby creating a reaction mixture A;
- c) mixing the reaction mixture A in a first reaction phase for a time sufficient to induce formation of macroaggregates;

- d) then mixing reaction mixture A less vigorously or not at all in a second reaction phase and measuring the macroaggregation of blood platelets in the second reaction phase in a first aggregation measurement;
- e) repeating steps a) and b) to generate an analogous second reaction mixture B;
- f) mixing reaction mixture B in a first reaction phase for a time sufficient to induce formation of macroaggregates, and measuring the macroaggregation of blood platelets in the first reaction phase wherein the second aggregation measurement is performed while mixing; and
- g) comparing the first aggregation measurement of A to the second aggregation measurement of B.

52. (New) The method of claim 51, wherein the mixing is accomplished by stirring, shaking, vibrating, or ultrasound.

53. (New) The method of claim 52, wherein the mixing is performed at a rate between 200 and 2000 rpm.

54. (New) The method of claim 51, wherein the blood platelets are fixed blood platelets.

55. (New) The method of claim 54, wherein platelet macroaggregation is measured using a ristocetin cofactor test.

56. (New) The method of claim 51, wherein the sample is chosen from at least one of whole blood, plasma, platelet-rich plasma, diluted platelet-rich plasma, and purified platelets.

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57. (New) The method of claim 51, wherein measuring the macroaggregation of blood platelets is performed by one of turbidimetric, nephelometric or electromagnetic methods.

58. (New) The method of claims 45 or 51, wherein the mixing of any reaction mixture is preceded by an incubation step without mixing.

59. (New) The method of claim 58, wherein there is a sequence of multiple alternating mixing steps and non-mixing incubation steps.

60. (New) The method of claims 45 or 51, wherein an initial aggregation measurement is taken before the reaction mixture is mixed.

61. (New) The method of claims 45 or 51, wherein the macroaggregation of blood platelets with other particles containing ligands or receptors that facilitate aggregation is measured.

62. (New) The method of claims 48 or 54, wherein said fixed blood platelets are replaced, in whole or part, by any of other cells, membrane vesicles, or artificial particles containing ligands or receptors that facilitate macroaggregation.

63. (New) The method of claims 45 or 51, wherein the mixing in the second reaction phase is adjusted to a lower intensity than the first reaction phase rather than completely stopped.

64. (New) The method of claim 45, wherein the sample is chosen from at least one of whole blood, plasma, platelet-rich plasma, diluted platelet-rich plasma, and purified platelets.

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